

**Area-Wide Soil Contamination
Work-Group 2, Protective Measures
Meeting One, March 27, 2002, Bellevue, WA
Meeting Summary**

These notes will provide a summary of key discussion points and action items but are not intended to be minutes of the meeting or to completely describe all discussions.

Introductions

Dave Bradley welcomed everyone to the meeting and thanked them for being willing to participate on Work Group 2. Participants introduced themselves and briefly described their background. Members were also asked if they could think of other individuals or other interested that should be included on the work group. It was suggested that a citizen group representative be added to the work group.

Project Overview

Dave Bradley provided an overview of the area-wide soil contamination project and the objectives of work group 2. (See attached presentation WG032702A.)

Scope of Work

Kris Hendrickson described the contractor scope of work related to work group 2, including the information survey, identification of site categories and remedial alternatives, evaluation of remedial alternatives, possible identification of model remedies, individual protective measures, deliverables, and schedule. (See attached presentation WG032702B.) This presentation led to discussions on several issues:

- **Requirements for Selecting Cleanup Actions Under the Model Toxics Control Act:** It was suggested that "appropriate solutions" rather than "model remedies" may better describe the actions recommended to address soil contamination. Although MTCA is a frame of reference for addressing sites with widespread low to moderate soil contamination, it is not the only one. There was some concern about how MTCA and work group/task force recommendations fit together. Some work group members expressed concern regarding possible inconsistencies between actions suggested by the work group and task force and requirements under MTCA for remediation of contaminants other than lead and arsenic, including how a remedy would be viewed if it did not meet MTCA requirements. It was strongly suggested that there be a clear distinction made between (1) solutions that are effective at reducing exposure and comply with MTCA and (2) solutions that are effective at reducing exposure but do not comply with MTCA (these might include protective solutions that are not considered permanent to the maximum extent practicable).
- **Remediation Levels:** The work group briefly discussed the concept of remediation levels (incorporated into the MTCA regulation as part of the 2001 amendments). There was also a request for information on remediation levels used at specific sites included in the information survey.
- **Individual Protection Measures:** An evaluation of the effectiveness of individual protection measures was included as a separate task in the original project scope of work. It is not included in the current contract because of budget constraints and concerns that insufficient amount of information is available to perform such an evaluation. There was some discussion of measures that may be taken by individuals to reduce exposure to soil contaminants and availability of

information regarding their effectiveness. Measures mentioned included grass-covered lawns versus bare dirt and use of flyers versus individual counseling. Joyce said there may be some information available on effectiveness based on blood lead levels. Kevin said that EPA is not doing follow-up on effectiveness of personal protective measures implemented at Superfund sites.

- **Schedule:** A one-page schedule showing when documents will be available for review was requested. A schedule showing document due dates and planned work group meeting dates will be sent to Work Group 2 members before the next meeting. Identification of important issues addressed in each document was requested to make document review easier. Comments on documents may be sent electronically or on paper to Kris or Dave prior to work group meetings or comments may be raised during meetings.

Criteria for Selecting Site Categories and Remedial Alternatives

Kris Hendrickson presented information on selection of categories of sites and remedial alternatives to be evaluated. (See attached presentation WG032702C.)

This project is focused on low to moderate soil contamination. It is assumed that groundwater contamination will not be caused by such contamination. It was suggested that this assumption should be tested based on actual site data.

The work group discussed how the types of sites with low to moderate levels of soil contamination by lead and/or arsenic might be grouped. Suggestions included using types of exposures likely at a site and characteristics of properties that would affect the selection of remedies. After discussion of possible exposure pathways, there was general agreement that exposure to children is an important criteria. The issue of potential exposure through accumulation in home grown foods was briefly discussed. It was noted that work presented at the recent Society of Toxicology meeting indicated a negative correlation between blood lead levels and home garden use. There was some discussion of whether or how cumulative exposure (to lead, arsenic, and other contaminants) from multiple sources (e.g. lead from lead paint) should be considered in remedy evaluation. There was general agreement that cumulative exposure at specific sites may affect when a cleanup is implemented but would not be a criteria in selection of site categories for evaluation. There was a question about how people would know that there is a possible problem from arsenic or lead in soil. There was a concern that enough information be provided about the site categories so people will be able to tell which category their property fits into.

It was suggested that there be a range of appropriate solutions identified so that owners may select one that is most feasible for their property. There was also a suggestion that remedial alternatives identified as appropriate solutions include both permanent and interim solutions. Alternatives should be clearly described as meeting MTCA requirements so that a No Further Action (NFA) determination could be made by Ecology or as an action that would reduce risk but not meet Ecology requirements for a NFA determination. The work group may identify changes needed to MTCA in order for additional solutions to meet MTCA requirements.

Action Items

Provide Work Group 2 members with a one-page list of meeting and document deliverable dates.

Next Scheduled Work Group 2 Meeting

Dates and times for upcoming meetings were selected by the group. The next meeting will be May 6, 9:30 to 1:00, at the Ecology Northwest Region Office in Bellevue. Other meetings are planned for June 6, 9:30 to 4:00 and July 23, 9:30 to 4:00. A September meeting is also planned; a date will be identified at the next work group meeting.

Attendance**Work Group 2 Members**

Carter Bagg, Office of Superintendent of Public Instruction
Hillary Karasz-Dominguez, Seattle-King County Dept. of Public Health
John Kissel, U.W. School of Public Health
Marjorie Norman, Foster Wheeler Corp.
Kevin Rochlin, US EPA
Ty Schreiner, Kennedy/Jenks Consultants
Craig Trueblood, Preston Gates & Ellis, LLP
Joyce Tsuji, Exponent

Work Group 2 Members Unable to Attend

Bonnie Meyer, Seattle-King County Dept. of Public Health

Consultant Support

Kris Hendrickson, Landau Associates

Agency Staff

Dave Bradley, Ecology
Michael Feldcamp, Ecology
David South, Ecology
Steve Thiele, Office of Attorney-General
Jim White, Health